

TABLE 10.3

**MORNING STAR MINE COST ESTIMATE
ALTERNATIVE 3 - CLEAN CLOSE HEAP LEACH PADS IN PLACE**

III. CLEAN CLOSURE	Quant	Units	Unit \$	Cost	Notes
A. Design, Management, Mobilization, Site Support					
1. Detailed Design	1	LS	\$110,000	\$110,000	
2. Construction Management	1	LS	\$75,000	\$75,000	
3. Mobilization / De-Mobilization	25	EA	\$1,500	\$37,500	
4. Site Support	1	LS	\$8,000	\$8,000	
			Subtotal	\$230,500	
B. Rinsing / Active Evaporation Systems on Heap Leach Pads					
1. See Table 10.5, Section A	1	LS	\$84,200	\$84,200	Design and install
2. See Table 10.5, Section B	1	LS	\$162,926	\$162,926	Operate and Maintain
			Subtotal	\$247,126	
C. Process Fluid Bio-Stabilization					
1. Sub-Contract	1	LS	\$800,000	\$800,000	
			Subtotal	\$800,000	
D. Regrade Heaps to 3:1					
1. See Table 10.2, Section C	1	CY	\$490,600	\$490,600	
			Subtotal	\$490,600	
E. Cap and Reclaim Heap Leach Pads					
1. See Table 10.2, Section D	1	LS	\$730,000	\$730,000	
			Subtotal	\$730,000	
F. Water Management (5 years after cap)					
1. Final Treatment and Disposal	1	LS	\$60,000	\$60,000	
			Subtotal	\$60,000	
G. Reclaim Pregnant Solution Pond (5 years after cap)					
1. See Table 10.2, Section G	1	LS	\$91,600	\$91,600	
			Subtotal	\$91,600	
ALTERNATIVE 3 - CLEAN CLOSE HEAP LEACH PADS IN PLACE				Subtotal	\$2,649,826
Contingency / Indirect				10%	\$264,983
				TOTAL COST	\$2,914,809

Assumptions:

Davis - Bacon Wages

Notes:

LS Lump Sum
MO Month
LF Linear Feet
GAL Gallon

TON Ton
HR Hour
EA Each
SMPL Sample

DAY Day
CY Cubic Yard
SF Square Feet
AC Acre

TABLE 10.3a

**MORNING STAR MINE COST ESTIMATE
ALTERNATIVE 3A (OPTION TO ALT. 3) - CLEAN CLOSE
HEAP LEACH PADS, HAUL TO PIT REPOSITORY**

III. CLEAN CLOSE, PIT	Quant	Units	Unit \$	Cost	Notes
A. Design, Management, Mobilization, Site Support					
1. See Table 10.3, Section A				Subtotal	\$230,500
B. Rinsing / Active Evaporation Systems on Heap Leach Pads					
1. See Table 10.5, Section A	1	LS	\$84,200	\$84,200	Design and install
2. See Table 10.5, Section B	1	LS	\$162,926	\$162,926	Operate and Maintain
				Subtotal	\$247,126
C. Process Fluid Bio-Stabilization					
1. Sub-Contract				Subtotal	\$800,000
Option: Haul Pad Material to Pit (Do Not Reclaim Pads in Place)					
1. Detailed Design	1	LS	\$60,000	\$60,000	
				Subtotal	\$60,000
2. Load, Haul and Place Waste Rock in Pit *					
a. Mobilization / Demobe	1	LS	\$20,000	\$20,000	
b. Excavate and Haul	149,000	CY	\$1	\$178,800	Fill above water table.
				Subtotal	\$198,800
* Place to 10 ft above water elevation, place leach pad material, then cover to elevation required for free flowing drainage.					
3. Load, Haul and Place Heap Material in Pit					
a. Excavate and Haul	1,418,000	CY	\$1	\$1,701,600	Includes 5% swell.
				Subtotal	\$1,701,600
4. Final Process Fluid Bio-Stabilization					
a. Sub-Contract	1	LS	\$200,000	\$200,000	
				Subtotal	\$200,000
5. Shape and Compact Surface	1	LS	245,300	\$245,300	
6. Place Cap	590,000	SF	\$0.35	\$206,500	GCL - subcontract.
7. Place Drain Layer	45,000	CY	\$3	\$112,500	24 inch at \$2.50 per CY
8. Place Media Growth Layer	22,500	CY	\$3	\$56,250	12 inch at \$2.50 per CY
9. Perimeter Drain	1	LS	\$60,000	\$60,000	liner and rock
					\$680,550
10. Reclaim Heap Footprints					
a. Earthwork	1	LS	\$25,000	\$25,000	Includes drainage / contours
b. Place Media Growth Layer	46,000	CY	\$3	\$115,000	12 inch at \$2.50 per CY
				Subtotal	\$140,000
11. Revegetate Pad and Pit Areas	70	AC	\$2,500	\$175,000	Seed, plants, fertilizer
				Subtotal	\$175,000
12. Reclaim Pregnant Solution Pond					
a. See Table 10.2, Section G				Subtotal	\$91,600
OPTION TO ALTERNATIVE 3 - CLEAN CLOSURE				Subtotal	\$4,525,176
HAUL PAD MATERIAL TO PIT				Contingency / Indirect	10%
					\$452,518
				TOTAL COST	\$4,977,694